# MONTANA LAND INFORMATION ACT GRANT APPLICATION STATE FISCAL YEAR 2024 JULY 1, 2023 – JUNE 30, 2024

## PLSS CONTROL COLLECTION



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## **APPLICATION FOR FY2024 MLIA GRANT FUNDING**

### SECTION 1 – ORGANIZATION, PARTNER, AND PROPOSAL INFORMATION

Primary Applicant Contact Information (Please fill this section out in its entirety)				
Name of Agency/Entity:		of Great Falls		
Department:		Information Technology		
Division/Section:	Мар	ping and Addressing		
Street:	2 Pa	ark Dr S, Rm #8		
City:	Gre	at Falls		
County:	Caso	cade		
State:	МТ			
Zip Code:	59401			
Pro	Project Manager Contact Information:			
Name:	Aaro	on Vaughn		
Title:	GIS Coordinator			
Email Address:	avaughn@greatfallsmt.net			
Phone Number:	(406)455-8486			
Fax Number:	(406) 454-3181			
Secondary Project Manager Contact Information:				
Name:	Tessa Switzer			
Title:	GIS Specialist			
Email Address	tswitzer@greatfallsmt.net			
Phone Number:	(406)455-8437			
MLIA Grant Funding Request & Match:				
Total Requested MLIA Funds: 25000				
Total Matched Funds:				

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Proposal Information				
Date Submitted:	2/15/2023			
Identified Grant	Follow-up to the initial City of Great Falls PLSS Adjustment off-cycle of			
Priority:	adjusting select control points in and around the city.			
Annual or Multi-				
Year Proposal:	Multi-year (this being second year)			
Proposal	Aaron Vaughn			
Prepared By:				
Short Title of				
Proposal:				
	PLSS Control Collection, Second Year – Great Falls, MT			

**Executive Summary**: Montana's Cadastral framework layer was originally based on the Bureau of Land Management's Geographic Coordinate Database (GCDB), which is known to be spatially inaccurate in several areas within Cascade County, including areas near its most populous city of Great Falls.

Given that the public uses the Cadastral property layers frequently, there presents a problem with property location accuracy and potential distrust or frustration when spatially accurate information is used in comparison to Plats and COS references and where glaring incongruences are apparent.

The goal of this grant is to reign in and correct much of the inaccuracies represented by antiquated Public Land Survey as a second year effort to gain further accuracies through hiring a surveyor to submit Survey Control corner records and control points to the Cascade County Clerk and Recorders.

The goal of this second year effort is to improve the accuracy of the PLSS in the surrounding areas outside of Great Falls, including areas extending out toward Vaughn and northeastern areas outside the city limits.

These adjustments will positively affect stakeholders in both public and private organizations but especially the County of Cascade, the City of Great Falls, and residents therein. The grant will fund mapping control points collected through contracted organization that uses Global Navigation Satellite System (GNSS) technology and professional survey techniques and tools, as demonstrated through the first collection funded by the 2022 Off-Cycle Grant.

The City will continue with the contracted organization, KLJ Engineering, to continue work on the collection where afterward the data will be send to MSDI theme stewards so as to ultimately

improve the Montana Spatial Data Infrastructure and Public Land Survey System standardized data for the Cadastral National Spatial Data Infrastructure (PLSS CadNSDI) and increase spatial accuracy for areas surrounding the City of Great Falls.

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Funding Partners: (required for each partner, copy box as needed)		
Name of Contact:	NA	
Name of Agency:		
Street:		
City:		
County:		
State:		
Zip Code:		
Contact Email Address:		
Contact Phone Number:		

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<sup>\*</sup>Each identified Funding Partner must also submit a letter of support, see Section 6.

#### SECTION 2 - RELEVANCE

15% of the Total Score - 300-word limit

\*DO NOT COMPLETE SECTION: If the Grant Application is for the sole purpose of collecting new survey control data or MTSRN Buildout Projects.

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#### SECTION 3 - PUBLIC BENEFIT

15% of the Total Score - 300-word limit

DO NOT COMPLETE SECTION: If the Grant Application is for A GIS Project Planning or the sole purpose of collecting new survey control data or MTSRN Buildout Projects.

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# SECTION 4 – PROJECT MANAGEMENT AND ORGANIZATIONAL CAPABILITY

There are two previous MLIA grants awarded to Cascade County and the City of Great Falls. The first grant helped start the implementation of a new NG9-1-1 relationship with a vendor and fund the past MLIA grant in 2020. The grant helped the city and county become closer to NG9-1-1 compliant and was made possible with the MLIA grant originally initiated by the City of Great Falls. The second MLIA grant award was in 2022 as part of an off-cycle Survey Control Collection project. This application is the extention of the previous and, if awarded, will follow-up on the collection to finish acquiring monument corner records and survey control.

Aaron Vaughn, GIS Coordinator, will be the primary manager for this grant project and will be responsible for conducting the communication, outreach, and submission of grant updates and progress. Vaughn has worked within the City of Great Falls for five years, both in GIS, and as a Land Management specialist.

As with the past MLIA grant, Vaughn has reported progress in quarterly reports, meeting project milestones, and communicating with external agencies and organization to bring the project to fruition. This is the follow-up year to the Off-Cycle grant that resulted in numerous new monument location, corner section records being created. Vaughn will again lead this effort to gather further control through a hired surveyor, KLJ Engineering, to bring more control points -- hopefully as many as 40 depending on the conditions of each monument.

The administration of the proposed grant project, again, will be by the City of Great Falls Mapping & Addressing Department. The City will again hire a licensed surveyor, KLJ Engineering out of Helena as part of the Statement of Work for the Off-Cycle grant of 2022 completed by the City in 2023.

The department is made up of two full-time GIS employees that are involved in the creation and maintenance of land records for the City. The department will contribute important and relevant knowledge to support the success of the project.

Vaughn will serve as the primary project manager. He has been with the department since 2018 and was promoted to the coordinator position in late 2019. Tessa Switzer, the GIS Specialist, will serve as the secondary project manager. Tessa has been with the department since 2019 but was previously the Cartographer at the MT Department of Revenue for a year.

The Mapping and Addressing team works together on GIS projects and promotes the interdepartmental collaboration to improve efficiencies as it relates to geospatial analysis and spatial information and logistics.

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#### SECTION 5 - SCOPE OF WORK

#### Goal 1.

#### **Data Gather and Communicate Work to Surveyor**

- Objective 1.1. Prioritize high-priority and second-priority PLSS Corner Locations for survey collection and send to surveyor.
  - -Completion Date: 07/15/2023
  - Task 1.1.1. Select Corner Records from Spreadsheet to Match Grant Amount -Completion Date: 07/28/2023
  - Task 1.1.2. Create Custom Map of Selected Corner Records for Surveyor's Reference
    - -Completion Date: 07/28/2023
  - Task 1.1.3. Gather Property Owners' Names and addresses at Priority Corner Locations and store within a spreadsheet to aid the surveyor.
    - -Completion Date: 08/30/2023
  - Task 1.1.4. Surveyor submits records based on section points selection.

    -Completion Date 10/01/2023 \*estimated time due to last collection.

#### Goal 2. Scan/Photograph Corner Records from Clerk and Recorders

- Objective 2.1. Copy Corner Records for 41 section monument/corner records at the Clerk and Recorder's office.
  - Task 2.1.1. Photo Image all Corner Records that are not digitally stored on their website.
    - -Completion Date: 11/30/2023
  - Task 2.1.2. Download all corner records that are digitally stored website and keep all of these in cloud file system along with the photographed records.

    -Completion Date: 11/30/2023

# Goal 3. Ensure Data Quality and Submit Section Corner Data to the State Library MLIA steward.

- Objective 3.1 Prepare and send all data for PLSS/CadNSDI adjustment to the State Library.
- Task 3.1.1 Quality check survey point data gathered for the grant by matching Section Township Range along with quarter section and GCDB ID as well as

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matching surveyor's report to the State Library's Technical Requirements \*Appendix B of the MLIA Grant Program Info Package Fiscal Year 2024.

-Completion Date: 06/25/2024

Task 3.1.2 Send all surveyed Control Point Collection monument details needed for PLSS adjustment for this project as detailed in the contractor's master list (\*See file 'GreatFallsCascade\_PLSSForm\_MLIA\_FY2024') to the State Library.

-Completion Date: 06/30/2023

#### SUBSECTION 5 - DELIVERABLES

The following deliverables will be obtained:

- A completed spreadsheet of control points whose monuments have been documented either in 1.) Through a certified corner record previously registered at Cascade County Clerk and Recorders or 2.) New corner record documentation created by the hired surveyor, which had not previously been submitted to the County Clerk's office. The aim is to gather as many as 41 control points, 37 of which are considered 'high-priority'. These all will be listed in the master spreadsheet GreatFallsCascade\_PLSSForm\_MLIA\_FY2024'.
- The actual Certified Corner Record Monument document that include either a
  GPS location or a surveyor's description or both. These documents will either
  come in a digital file downloaded from the Cascade County Clerk and Recorder's
  Portal (EagleWeb.com) or photographed in high-res imagery, both types stored
  in files arranged by names based on Section, Township, and Range. All records
  will be sent to the Montana State Library Sharepoint for transfer before or at
  closeout.

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#### SECTION 6 - BUDGET JUSTIFICATION AND BUDGET TABLE

The budget is based on full grant award that the contractor assumes will be highest priority due to the subject matter of collecting survey control. The contractor has previously been awarded grant funds to hire a surveyor along with the City's in-kind donation for the 2022 Off-Cycle MLIA grant. This budget cycle is for the second year follow-up to the initial PLSS Survey Control that started in 2022.

This grant is funding to complete the capture and recording of all high-priority control points sought for adjustment. The award has been calculated based on the average cost per corner from the surveyor's invoice and quotation from the first year's collection project, along and the amount of in-kind partial match.

With the proposed total, including in-kind, totals \$26,500 (\$25,000 + \$1,500 in-kind). The cost for the surveyor, for as many as 37 high-priority control points. This remaining cost will cover the full list of desired monuments needing records for adequate adjustment along with the in-kind work.

We did receive Cascade County GIS department's support, submitted through the City's offcycle grant that hold true for this second year. This has already been submitted to the State Library

\*See the MLIA\_FY2024\_CascadeCityofGFBudgetTable in submitted materials for itemized details.

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#### SECTION 7 - PROJECT SUSTAINABILITY

This grant application is to follow-up on year two of capturing Survey Control collection to ultimately adjust the PLSS in areas of highest population within the County of Cascade. Our follow-up to a successful past year (Off-Cycle 2022 MLIA PLSS Adjustment) shows a perpetuance of effort to shore up poor cadastral reference and to benefit the public who use these geospatial data and visualization within a GIS.

In addition, upon finalizing these Survey Control submittals, much of the county will be accounted for and subsequent grant requests of this nature will not be needed. Upon adjustment, any datasets that refer to the PLSS, such as Plats, Certificates of Survey, can be used with greater accuracy to adjust property lines that were erroneously completed based off the old data. Here in the City of Great Falls City GIS office, redrawing parcel and lot lines will be priorities with the adjusted PLSS as reference so an indirect improvement to such spatial data and the public benefit will also come to fruition.

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#### **SECTION 8 - RENEWABLE GRANT ACCOUNTABILITY**

Not Scored - Please use this web map to research and identify past awarded MLIA Grants: <a href="https://arcg.is/0muzPf">https://arcg.is/0muzPf</a>.

Applicants awarded MLIA Grants within the past five years, must include the following reporting:

- <u>FY2023 MLIA Grantees</u>: Report on the progress made toward meeting the requirements of the grant. The report must include the status of the project timeline, tasks, and deliverables.
  - o (300-word limit)
- <u>FY2022 FY2019 MLIA Grantees</u>: Provide a written narrative for each grant awarded, outlining the successes and failures of the grant. Explain how tasks, timelines, and deliverables of the project were or were not met. Demonstrate how past project failures will ensure future successes.
  - o (200-word limit each).

#### Tip:

Don't forget to change the page numbers & table of contents before submitting this document.

#### Tip:

Don't forget to delete extra instructions, page limits, and these tips before submittal.

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#### MLIA Grant FY2024 - Proposed Survey Control Point Collection\* Grant Project Name:

Grant Project Identified Project Manager:

FY2024 PLSS Grant - City of Great Falls

Aaron Vaughn

Number	GCDB ID	Township	Range	Section	Quarter	Corner	Priority	Notes
		/This is	whore the e	rantee will ide	ntify the	orners for	(Priority Corner vs.	
		(This is	where the g		nuly the c	orners for	Alternate Corner)	
				collection)			Grantee /MSL Action	
11	MT200210N0020E0_597100	21N	02E	1	NW	Section	High Priority	
19	MT200210N0050E0_100400	21N	04E	13	SE	Section	High Priority	
26	MT200210N0050E0_100100	21N	04E	36	SE	Township	High Priority	
92	MT200190N0020E0_100100	19N	02E	31	SW	Township	High Priority	Replaces Pt # 27 Public access (?), should be within River Rd ROW
93	MT200200N0050E0_100500	20N	04E	12	SE	Section	High Priority	Replaces "t #28
28	MT200200N0040E0_500500	20N	04E	10	SE	Section	High Priority	
31	MT200200N0040E0_300300	20N	04E	20	SE	Section	High Priority	
32	MT200200N0040E0_100100	20N	03E	36	SE	Township	High Priority	
33	MT200200N0040E0_300100	20N	04E	32	SE	Section	High Priority	
34	MT200200N0040E0_500100	20N	04E	34	SE	Section	High Priority	
35	MT200200N0050E0_100100	20N	04E	36	SE	Township	High Priority	
44	MT200200N0040E0_500300	20N	04E	22	SE	Section	His rea rity	
67	MT200200N0020E0_200300	20N	02E	20	SW	Section	h. h Privrity	Public access (?), should be within Ulm Vaughn Rd ROW
68	MT200200N0020E0_100200	20N	02E	30	SW	Section	Higi riority	
69	MT200200N0020E0_240200	20N	02E	29	S	Quarter	। र्h P. hrity	Public access, should be near CL Ulm Vaughn Rd
70	MT200200N0020E0_400200	20N	02E	27	SW	Section	H h Priority	Public acess (?), should be within Collins Rd ROW
71	MT200200N0020E0_200100	20N	02E	32	SW	Section	', gh Priority	SW - Public corner, should be near CL W Ulm Rd
66	MT200190N0020E0_300500	19N	02E	9	SW	Section	High Priority	Previous plan #66 (as secondary pt)
73	MT200210N0020E0_100400	21N	02E	18	SW	Section	High Priority	
74	MT200210N0010E0_600300	21N	01E	24	SW	Section	High Priority	SW - Public corner (?), should be within 12th St ROW
75	MT200210N0020E0_100100	21N	02E	31	SW	Township	High Priority	SW - Public corner (?), should be within Ulm Vaughn Rd ROW
76	MT200210N0010E0_400100	21N	01E	33	SE	Section	High Priority	SE - Public corner (?), should be within Fourmile Creek Rd ROW
77	MT200210N0010E0_300300	21N	01E	21	SW	Section	High Priority	
78	MT200210N0010E0_100100	21N	01E	31	SW	Township	High Priority	
79	MT200210N0010W0_600500	21N	01W	20	SW	Section	High Priority	SW - Public corner (?), should be within Stevenson Rd ROW
80	MT200210N0010W0_460160	21N	01W	34	NE Center	1/16	High Priority	NE Center - Public corner (?), should be within Choteau St ROW
81	MT200210N0010W0_420140	21N	01W	34	W Center	1/16	High Priority	W Center - Public corner (?), should be within MT Hwy 200 ROW
82	MT200200N0010W0_440700	20N	01W	34	S	Quarter	High Priority	S - Public corner (?), should be within Sun River Cascade Rd ROW
83	MT200210N0010W0_297100	20N	02W	5	NE	Section	High Priority	NE - Public corner (?), should be within N Birdtail Rd ROW
84	MT200200N0020W0_640600	20N	02W	12	N	Quarter	High Priority	
85	MT200200N0010W0_100540	20N	01W	7	W	Quarter	High Priority	W - Public corner (?), should be within Knapstad Rd ROW
86	MT200200N0020W0_600540	20N	02W	12	W	Quarter	High Priority	W - Public corner (?), should be within MT Hwy 200 ROW
87	MT200200N0020W0_400500	20N	02W	10	SW	Section	High Priority	SW - Public corner (?), should be within MT Hwy 200 ROW
88	MT200200N0020W0_100500	20N	02W	7	SW	Section	High Priority	SW - Public corner (?), should be within MT Hwy 200 ROW
89	MT200190N0010E0_100100	19N	01E	31	SW	Township	High Priority	
90	MT200180N0010W0_500200	18N	01W	26	SW	Section	High Priority	
91	MT200180N0010W0_600100	18N	01W	36	SW	Section	High Priority	
65	MT200190N0020E0_100500	19N	02E	7	SW	Section	Secondary Priority	Previous plan #65
94	MT200200N0030W0_600400	20N	03W	13	SW	Section	Secondary Priority	
95	MT200210N0020W0_600200	21N	02W	25	SW	Section	Secondary Priority	
96	MT200210N0010E0_440300	21N	01E	27	N	Quarter	Secondary Priority	
		1						

Proposed PLSS Control - This form is only required for applicants proposing PLLSS/survey control projects. Those applicants must complete this form with their proposed collection information and upload it into their respective grant

Please do your best to fill this form out, MSL will work internally to research and review points upon award and prior to executing statement of work. It is best to have more points in the proposed list than what is requested for funding, Please insert as many lines as necessary into this excel worksheet. Please do not enter any information in the Approval Status category. MSL will work with the approved grant project Project Managers to approve points. This points are roposed and upon further research, alternative points may be required for collection.

MLIA GRANT DETAILED BUDGET TABLE					
Tasks	Category Type	Funding Source	Hours	Rate	Cost
Task 1.1.1 - Select priortiy monument points needing to be surveyed to submit					
to surveyor, taken from master spreadsheet created and submitted in first					
	Personnel (incl. fringe benefits)	In-Kind	3	\$30.00	\$ 90.00
Task 1.1.2 - Create Custom Map of All Priority Monument Points Needing to Be					
, , , , , , , , , , , , , , , , , , , ,	Personnel (incl. fringe benefits)	In-Kind	7	\$30.00	\$ 210.00
Task 1.1.3 - Assist Hired Surveyor with Private Property Access by Providing a					
Spreadsheet Table with Sections, Parcels and their associated Property Owner					
Names and Mailing Addresses	Personnel (incl. fringe benefits)	In-Kind	8	\$30.00	\$ 240.00
Task 1.1.4 - Task 1.1.4. Surveyor submits records based on section points					
selection.	Contractual	MLIA Grant Funds	37.037037	\$675.00	\$25,000.00
Task 2.1.1 - Photograph all hard copy corner records of the survey control					
collection monuments that are already stored within the County Clerk and					
Recorders.	Personnel (incl. fringe benefits)	In-Kind	23	\$30.00	\$ 690.00
Task 2.1.2 - Download all corner records that are digitally stored at the county's					
website and combine these files with the photographs to store in a file system					
later to be uploaded to the State Library.	Personnel (incl. fringe benefits)	In-Kind	5	\$30.00	\$ 150.00
Task 3.1.1 - Quality check survey point data gathered for the grant by matching Section Township Range along with quarter section and GCDB ID as well as matching surveyor's report to the State Library's Technical Requirements *Appendix B of the MLIA Grant Program Info Package Fiscal Year 2024.	Personnel (incl. fringe benefits)	In-Kind	4	\$30.00	\$ 120.00
		Totals:	87.037037	><	\$ 26,500.00

#### **Authorizing Statement**

I hereby certify that I have read the application and the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.

I further certify that this project will comply with applicable statutory and regulatory standards.

I further certify that I am (by my signature) authorized to enter into a binding agreement with the Montana State Library to obtain a grant if this application receives approval.

Greg Doyon	City Manager
Authorized Signer Name	Title
DocuSigned by:  52D0375CB3794AF  Signature	2/27/2023  Date Signed
Completed Application Package Received by:	
Erin Fashoway Name	MLIA Grant Administrator Title
Docusigned by:  898149F544564A6  Signature	2/28/2023  Date Signed

## **DocuSign**

#### **Certificate Of Completion**

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Pool: Montana State Library

Location: DocuSign

Location: DocuSign

#### **Signer Events**

Greg Doyon

gdoyon@greatfallsmt.net

City Manager

Security Level: Email, Account Authentication

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#### Signature

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Erin Fashoway
efashoway@mt.gov
Montana GIS Coordinator

State of Montana

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#### •

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## Status

# Timestamp Timestamp

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**Editor Delivery Events** 

#### Status

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Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	2/27/2023 12:31:34 PM
Certified Delivered	Security Checked	2/28/2023 6:55:37 AM
Signing Complete	Security Checked	2/28/2023 6:56:58 AM
Completed	Security Checked	2/28/2023 6:57:00 AM
Payment Events	Status	Timestamps